CLAIMS

What is claimed is:

1. A method of forming a first state and a second state alternatively and sequentially on an optical recording medium in response to input data having a first level and a second level in an optical recording apparatus, the method comprising:

generating a recording waveform which includes a first multi-pulse having a plurality of first pulses corresponding to the first level of the input data and a second multi-pulse having a plurality of second pulses corresponding to the second level of the input data.

2. The method of claim 1, further comprising:

forming the first state on the optical recording medium according to the first pulses of the first multi-pulse; and

forming the second state on the optical recording medium according to the second pulses of the second multi-pulse.

3. The method of claim 1, further comprising:

forming a mark as the first state on the optical recording medium according to the first multi-pulse; and

forming a space as the second state on the optical recording medium according to the second multi-pulse.

4. The method of claim 1, wherein the generating of the recording waveform comprises:

changing the first multi-pulse according to a characteristic of the second pulses of the second multi-pulse.

5. The method of claim 4, wherein the second multi-pulse comprises a starting pulse and an ending pulse, and the changing of the first multi-pulse comprises:

changing a starting pulse of the first multi-pulse according to a characteristic of one of the starting pulse and the ending pulse of the second multi-pulse.

6. The method of claim 5, wherein the changing of the starting pulse of the first

multi-pulse comprises:

changing a voltage level of the starting pulse of the first multi-pulse.

- The method of claim 1, further comprising:
 generating information data representing a characteristic of one of the first multi-pulse
 and the second multi-pulse.
 - 8. The method of claim 7, further comprising: rotating the optical recording medium in response to the information data.
 - 9. The method of claim 7, further comprising: rotating the optical recording medium at a speed corresponding to the information data.
 - 10. The method of claim 7, further comprising: recording the information data on the optical recording medium.
- 11. A method of forming a first state and a second state alternatively and sequentially on an information storage medium in response to input data having a first level and a second level, respectively, in a recording apparatus, the method comprising:

generating a recording waveform which comprises a recording pattern corresponding to the first level of the input data, an erase pattern having a multi-pulse corresponding to the second level of the input data, and a cooling pulse concatenating the recording and erase patterns.